

Claims

- [c1] A vehicular rearview mirror system suitable for use in a vehicle having a vehicle control, said vehicle control generating an output having a particular protocol representing a state of said output, said vehicular rearview mirror system comprising:
- a variable reflective element, said variable reflective element assuming a partial reflectance level in response to a drive signal;
 - a mirror control, said mirror control responsive to the output of the vehicle control for generating at least one mirror control output, said at least one mirror control output including a value for said drive signal;
 - said mirror control determining a protocol of said output of said vehicle control including monitoring said output of said vehicle control and attempting to conclude a state of said output of said vehicle control.
- [c2] The vehicular rearview mirror system of claim 1 wherein said output of said vehicle control comprises at least one chosen from gear status information, engine information, alarm information and door status information.
- [c3] The vehicular rearview mirror system of claim 2 wherein

said output of said vehicle control comprises gear status information.

- [c4] The vehicular rearview mirror system of claim 3 wherein said mirror control attempts to conclude a state of said output of the vehicle control being whether the vehicle is in reverse gear or the vehicle is not in reverse gear.
- [c5] The vehicular rearview mirror system of claim 2 wherein said output of said vehicle control comprises door status information.
- [c6] The vehicular rearview mirror system of claim 5 wherein said mirror control attempts to conclude a state of said output of the vehicle control being whether vehicle doors are closed or a vehicle door is not closed.
- [c7] The vehicular rearview mirror system of claim 6 further including a lighting assembly, wherein said at least one mirror control output controls said lighting assembly.
- [c8] The vehicle rearview mirror system of claim 7 wherein said variable reflective element comprises an interior variable reflective element and wherein said lighting assembly is associated with a housing for said interior variable reflective element.
- [c9] The vehicle rearview mirror system of claim 7 wherein

said variable reflective element comprises an exterior variable reflective element and wherein said lighting assembly is associated with a housing for said exterior variable reflective element.

[c10] The vehicle rearview mirror system of claim 1 wherein said variable reflective element comprises an electro-optic element.

[c11] The vehicle rearview mirror system of claim 10 wherein said electro-optic element comprises an electrochromic element.

[c12] The vehicle rearview mirror system of claim 1 wherein said mirror control comprises a microcomputer having software and wherein said microcomputer determines said protocol by software processing.

[c13] The vehicle rearview mirror system of claim 12 wherein said microcomputer monitors said output of said vehicle control upon starting of the vehicle.

[c14] The vehicle rearview mirror system of claim 12 wherein said microcomputer monitors said output of said vehicle control upon running of the vehicle.

[c15] The vehicle rearview mirror system of claim 1 including at least one light sensor, wherein said mirror control es-

establishes a value for said drive signal in response to an output of said at least one light sensor.

- [c16] A vehicle rearview mirror system for use with a vehicle having a reverse gear and a reverse-gear indication, said reverse-gear indication having a particular protocol, said mirror system, comprising:
- an electro-optic reflective element;
 - a controller, said controller establishing a reflectance level of said reflective element including establishing a particular reflectance level of said reflective element in response to the reverse-gear indication indicating that the vehicle is in reverse gear; and
 - said controller determining the protocol of said reverse-gear indication, said determining said protocol including monitoring the reverse-gear indication and attempting to conclude at least one chosen from (i) the vehicle being in reverse gear and (ii) the vehicle not being in reverse gear.
- [c17] The rearview mirror system of claim 16 wherein said controller comprises a microcomputer having software and wherein said microcomputer determines said protocol by software processing.
- [c18] The rearview mirror system of claim 17 wherein said microcomputer determines said protocol at least in part by

monitoring said reverse-gear indication upon starting of the vehicle.

[c19] The rearview mirror system of claim 18 wherein said microcomputer determines said protocol at least in part by monitoring said reverse-gear indication during running of the vehicle.

[c20] The rearview mirror system of claim 17 wherein said microcomputer determines said protocol at least in part by monitoring said reverse-gear indication during running of the vehicle.

[c21] The rearview mirror system of claim 16 wherein said controller determines said protocol at least in part by monitoring said reverse-gear indication upon starting of the vehicle.

[c22] The rearview mirror system of claim 21 wherein said controller determines said protocol at least in part by monitoring said reverse-gear indication during running of the vehicle.

[c23] The rearview mirror system of claim 16 wherein said controller determines said protocol at least in part by monitoring said reverse-gear indication during running of the vehicle.

- [c24] The rearview mirror system of claim 16 including at least one light sensor, wherein said controller determines said reflectance level in response to an output of said at least one light sensor.
- [c25] The rearview mirror system of claim 16 wherein said electro-optic reflective element comprises an electrochromic reflective element.
- [c26] The rearview mirror system of claim 16 wherein said controller determines said protocol at least in part by maintaining a reverse-inhibit-running parameter and determining when said reverse-inhibit-running parameter is at or above a particular high value or is at or below a particular low value.
- [c27] The rearview mirror system of claim 26 wherein said controller determines said protocol at least in part by maintaining a reverse-inhibit-ignition-cycle parameter and determining when said reverse-inhibit-ignition-cycle parameter is at or above a particular high value or is at or below a particular low value.
- [c28] The rearview mirror system of claim 27 wherein said controller increments said reverse-inhibit-ignition-cycle parameter when said reverse-inhibit-running parameter is at or above said particular high value and decrements

said reverse-inhibit-ignition-cycle parameter when said reverse-inhibit-running parameter is at or below said particular low value.

- [c29] The rearview mirror system of claim 28 wherein said controller increments and decrements said reverse-inhibit-ignition-cycle parameter a limited number of times during an ignition cycle.
- [c30] The rearview mirror system of claim 28 wherein said controller comprises a microcomputer.
- [c31] The rearview mirror system of claim 30 wherein said microcomputer determines said reflectance level of said reflective element.